

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/623,500A  
Source: 1Fw16  
Date Processed by STIC: 9/19/06

***ENTERED***



IFW16

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/623,500A

DATE: 09/19/2006  
TIME: 13:28:54

Input Set : A:\10623500\_ST25\_txt.TXT  
Output Set: N:\CRF4\09192006\J623500A.raw

3 <110> APPLICANT: Vanderkimpfen, Greet  
4 Van Eldik, Gerben  
5 Meulewaeter, Frank  
7 <120> TITLE OF INVENTION: Corn root preferential promoters and uses thereof  
9 <130> FILE REFERENCE: 1021565-000119  
11 <140> CURRENT APPLICATION NUMBER: US 10/623,500A  
12 <141> CURRENT FILING DATE: 2003-07-22  
14 <150> PRIOR APPLICATION NUMBER: US 60/399,983  
15 <151> PRIOR FILING DATE: 2002-07-31  
17 <160> NUMBER OF SEQ ID NOS: 31  
19 <170> SOFTWARE: PatentIn version 3.3  
21 <210> SEQ ID NO: 1  
22 <211> LENGTH: 378  
23 <212> TYPE: DNA  
24 <213> ORGANISM: Zea mays  
27 <220> FEATURE:  
28 <221> NAME/KEY: misc\_feature  
29 <222> LOCATION: (1)..(338)  
30 <223> OTHER INFORMATION: promoter  
32 <220> FEATURE:  
33 <221> NAME/KEY: misc\_feature  
34 <222> LOCATION: (339)..(370)  
35 <223> OTHER INFORMATION: 5' UTR  
37 <400> SEQUENCE: 1  
38 tactacagat aacacgacag ttaacgagcg ggtatgggtt gtttccttg agcactgtt 60  
40 ttctctagaa tctctgatc tctctgttc ttgatgacac cgagcggaaa tagcagttgg 120  
42 aagaggtat tgggcttcag cgcgcgtcc aacccaagtg gttccacaa cgtaacctc 180  
44 atgcagctt aaatacagcc agttgtgatc catctgccac agctgtttt acctcagatg 240  
46 tgcacacag tgttacacct gtttctacct cgccatgtg ctacacaggc gcttatgact 300  
48 gcctataaaa tggccggat cggtgaggct gctgaaacca aggagagaga gcatatatat 360  
50 ccaccgatcc atggcatg 378  
53 <210> SEQ ID NO: 2  
54 <211> LENGTH: 1236  
55 <212> TYPE: DNA  
56 <213> ORGANISM: Zea mays  
59 <220> FEATURE:  
60 <221> NAME/KEY: misc\_feature  
61 <222> LOCATION: (11)..(1196)  
62 <223> OTHER INFORMATION: promoter  
64 <220> FEATURE:  
65 <221> NAME/KEY: misc\_feature  
66 <222> LOCATION: (1197)..(1228)  
67 <223> OTHER INFORMATION: 5' UTR

16  
P.

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69 <400> SEQUENCE: 2

70 cgggatcccg gctttctgca ctggacgtag tgtactttat acttggaaact tgtataaatt 60  
 72 tgtgtctttt atactccctc agtttggaaat atagttcttt ctgcctttt ttttccgtc 120  
 74 cacactcatt tgaatgataa taaaatataga tatacataca aactatattc ataggttaat 180  
 76 taataaaatgt atattttagtc taaaatgaaa tatattttac ccatcgatt ccttatgcat 240  
 78 gaaatgtga tctacttgc tgatggaaaa atactatgac gttgtgtac cagaccgcac 300  
 80 ctaaatcaaa ctgtttcag agatggccat tctattattt tagatttgc atacgtacga 360  
 82 tgtactttt tatccataaa ataccgtacc attatgatat ggatatctt atgagaggga 420  
 84 ctcattatct ctctctatat atataaacac ctatatatca aacaggcatc aagaaaaata 480  
 86 gatgattttt ttttctgaag tagagtaca gaagcagctg aagtgtgagt cttttgc 540  
 88 caatttata atgtgtaaag aaaatgacgc caatgaaata tgtgtctgg ctgacgtgtt 600  
 90 gtttggtgaa agccaatttt gttgtatata gggggccag agcccagttt tatttgc 660  
 92 ccggactggc gccaaaaaaaaaa aaaatccgga tagtactatt ccgctaactg tgcacactt 720  
 94 tattctaaaat tagtcatcca aattaaagaa ctaaccttag ataaaaaaa ttaaacaag 780  
 96 tatgacaagt tagtagcaa actaaactaa agaggataac acaacagtta accgtcgacg 840  
 98 tgcgcccctt gaatttacta ctacagataa cacgacagtt aacgagcggg tatgggtgt 900  
 100 ttcccttgag cactttgtt ctctagaatc tctaatctc tctctgtt gatgacaccc 960  
 102 agcggaaata gcagttggaa gaggtgattt ggcttcagcg cgcgatccaa cccaaatggg 1020  
 104 ttccacaacg tgaacctcat gcagctaaa atacagccag ttgtgatcca tctgccacag 1080  
 106 ctgtttctac ctcagatgtc ctacacagtg tattacctgt ttctacctcg cagatgtgct 1140  
 108 acacagttgc ttatgactgc ctataaaatg gccggatcg gtgaggctgc tggaaaccaag 1200  
 110 gagagagagc atatatatcc accgatccat ggcattt 1236

113 <210> SEQ ID NO: 3

114 <211> LENGTH: 592

115 <212> TYPE: DNA

116 <213> ORGANISM: Artificial

118 <220> FEATURE:

119 <223> OTHER INFORMATION: cDNA of the GL4 transcript

122 <220> FEATURE:

123 <221> NAME/KEY: misc\_feature

124 <222> LOCATION: (540)..(540)

125 <223> OTHER INFORMATION: n at position 540 represents any nucleotide

127 <400> SEQUENCE: 3

128 caaggagaga gagcatatat atccaccgat catgtgaag ggtggcagca agaaggaagt 60  
 130 ggccgggtcg gggccgggtgg tggccataact gctgggtctg cagctgtatgg cagctccacc 120  
 132 gacggccatg gcccggcgct cgccgcgcgg agccgtccgg gatggctccc tcgcccacgac 180  
 134 gcccaagggt acgtatgtt cagccacgct gtgcacacg ggggagacat gcaaatacat 240  
 136 tacctgcctc actcctgtt gtcctgtt cttatgtat cgtcgctgtt acatcatatt 300  
 138 tactcctgtc gtcgttgag gccattctgtt gtacgtaat gaagccacta ctactctcac 360  
 140 acagcatgcg ccggccgacg acgtgcgtac gtatatatat acgtctacc tcgtgagtt 420  
 142 ttgttcgatg gatactgttt tcaaggcatc catccatcca tggatgttta tgtacgtata 480  

W--> 144 tgtgttagtc gtgtgtcagg caaccgggca gcagaagggg gtgtgttattt atatataatn 540

146 acgtcttctg gtgatataat aataaagggg ggcattgttgg atgtgtgcaaa 592

149 <210> SEQ ID NO: 4

150 <211> LENGTH: 95

151 <212> TYPE: PRT

152 <213> ORGANISM: Zea mays

154 <400> SEQUENCE: 4

156 Met Met Lys Gly Gly Ser Lys Lys Glu Val Ala Gly Ala Ala Ala Val

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Input Set : A:\10623500\_ST25\_txt.TXT  
 Output Set: N:\CRF4\09192006\J623500A.raw

157 1 5 10 15  
 160 Val Ala Ile Leu Leu Val Leu Gln Leu Met Ala Ala Pro Pro Thr Ala  
 161 20 25 30  
 164 Met Ala Ala Arg Ser Pro Arg Gly Ala Val Pro Asp Gly Ser Leu Ala  
 165 35 40 45  
 168 Thr Thr Pro Lys Val Thr Met Leu Ser Ala Thr Leu Cys Tyr Thr Gly  
 169 50 55 60  
 172 Glu Thr Cys Lys Tyr Ile Thr Cys Leu Thr Pro Ala Cys Ser Cys Asn  
 173 65 70 75 80  
 176 Tyr Asp Asp Arg Arg Cys Tyr Ile Ile Phe Thr Pro Ala Ala Ala  
 177 85 90 95  
 180 <210> SEQ ID NO: 5  
 181 <211> LENGTH: 535  
 182 <212> TYPE: DNA  
 183 <213> ORGANISM: Artificial  
 185 <220> FEATURE:  
 186 <223> OTHER INFORMATION: cDNA of the GL5 transcript  
 189 <220> FEATURE:  
 190 <221> NAME/KEY: misc\_feature  
 191 <222> LOCATION: (82)..(82)  
 192 <223> OTHER INFORMATION: n represents any nucleotide  
 194 <400> SEQUENCE: 5  
 195 ccaatcagat agagagcata gtcgatcatg aagggtggca agaagaaaat ggccgggtgcg 60  
 W--> 197 gtgggtggcca tactgctgg tntgcagctc atggcagctc caccgacggc catggccgccc 120  
 199 cgctcgccgc gcggagccgt gccggatggc tccctcgcca cgacgcccaa ggtgacgatg 180  
 201 ctgtcgccca cgctgtgcta cacgggggag acatgcaaat acattggctg cctcactcct 240  
 203 gcttgctctt gcaactatag tgatcgtcta tgctacatca tatttactcc tggtgcttga 300  
 205 ggccattcccg cgaagccaca actcttacaa tatgcatgctg ccggccgacg acgacgcgcg 360  
 207 ctgcctctcg tgagcttctg ttcaagtgtat gcatgttca aggcatccat ggatgcttta 420  
 209 cgtatatgcg tattatattag ccgtgtcagg gaaccggaca gaaggggtg ttgtttata 480  
 211 ttacgtctt ctgggtgatca aataaagggg aaatatatgt tggatgtgtg caaaa 535  
 214 <210> SEQ ID NO: 6  
 215 <211> LENGTH: 90  
 216 <212> TYPE: PRT  
 217 <213> ORGANISM: Zea mays  
 219 <400> SEQUENCE: 6  
 221 Met Lys Gly Gly Lys Lys Glu Val Ala Gly Ala Val Val Ala Ile Leu  
 222 1 5 10 15  
 225 Leu Val Leu Gln Leu Met Ala Ala Pro Pro Thr Ala Met Ala Ala Arg  
 226 20 25 30  
 229 Ser Pro Arg Gly Ala Val Pro Asp Gly Ser Leu Ala Thr Thr Pro Lys  
 230 35 40 45  
 233 Val Thr Met Leu Ser Ala Thr Leu Cys Tyr Thr Gly Glu Thr Cys Lys  
 234 50 55 60  
 237 Tyr Ile Gly Cys Leu Thr Pro Ala Cys Ser Cys Asn Tyr Ser Asp Arg  
 238 65 70 75 80  
 241 Leu Cys Tyr Ile Ile Phe Thr Pro Val Ala  
 242 85 90  
 245 <210> SEQ ID NO: 7

## RAW SEQUENCE LISTING

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Input Set : A:\10623500\_ST25\_txt.TXT

Output Set: N:\CRF4\09192006\J623500A.raw

246 <211> LENGTH: 24  
 247 <212> TYPE: DNA  
 248 <213> ORGANISM: Artificial  
 250 <220> FEATURE:  
 251 <223> OTHER INFORMATION: oligonucleotide primer GVK27  
 253 <400> SEQUENCE: 7  
 254 gctgacagca tcgtcacctt gggc 24  
 257 <210> SEQ ID NO: 8  
 258 <211> LENGTH: 25  
 259 <212> TYPE: DNA  
 260 <213> ORGANISM: Artificial  
 262 <220> FEATURE:  
 263 <223> OTHER INFORMATION: oligonucleotide primer GVK28  
 265 <400> SEQUENCE: 8  
 266 gctgcagaac cagcagtatg gccac 25  
 269 <210> SEQ ID NO: 9  
 270 <211> LENGTH: 27  
 271 <212> TYPE: DNA  
 272 <213> ORGANISM: Artificial  
 274 <220> FEATURE:  
 275 <223> OTHER INFORMATION: oligonucleotide primer GVK29  
 277 <400> SEQUENCE: 9  
 278 catgccatgg atcggatggat atatatg 27  
 281 <210> SEQ ID NO: 10  
 282 <211> LENGTH: 25  
 283 <212> TYPE: DNA  
 284 <213> ORGANISM: Artificial  
 286 <220> FEATURE:  
 287 <223> OTHER INFORMATION: oligonucleotide primer GVK30  
 289 <400> SEQUENCE: 10  
 290 catgccatgg atcgactatg ctctc 25  
 293 <210> SEQ ID NO: 11  
 294 <211> LENGTH: 164  
 295 <212> TYPE: DNA  
 296 <213> ORGANISM: Artificial  
 298 <220> FEATURE:  
 299 <223> OTHER INFORMATION: cDNA of 3' end of the GL12 transcript  
 302 <220> FEATURE:  
 303 <221> NAME/KEY: misc\_feature  
 304 <222> LOCATION: (45)..(45)  
 305 <223> OTHER INFORMATION: n= any nucleotide  
 307 <220> FEATURE:  
 308 <221> NAME/KEY: misc\_feature  
 309 <222> LOCATION: (53)..(53)  
 310 <223> OTHER INFORMATION: n= any nucleotide  
 312 <220> FEATURE:  
 313 <221> NAME/KEY: misc\_feature  
 314 <222> LOCATION: (57)..(57)  
 315 <223> OTHER INFORMATION: n= any nucleotide

RAW SEQUENCE LISTING DATE: 09/19/2006  
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Input Set : A:\10623500\_ST25\_txt.TXT  
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317 <220> FEATURE:  
 318 <221> NAME/KEY: misc\_feature  
 319 <222> LOCATION: (59)..(59)  
 320 <223> OTHER INFORMATION: n= any nucleotide  
 322 <220> FEATURE:  
 323 <221> NAME/KEY: misc\_feature  
 324 <222> LOCATION: (61)..(61)  
 325 <223> OTHER INFORMATION: n= any nucleotide  
 327 <220> FEATURE:  
 328 <221> NAME/KEY: misc\_feature  
 329 <222> LOCATION: (88)..(88)  
 330 <223> OTHER INFORMATION: n= any nucleotide  
 332 <220> FEATURE:  
 333 <221> NAME/KEY: misc\_feature  
 334 <222> LOCATION: (93)..(93)  
 335 <223> OTHER INFORMATION: n= any nucleotide  
 337 <220> FEATURE:  
 338 <221> NAME/KEY: misc\_feature  
 339 <222> LOCATION: (96)..(96)  
 340 <223> OTHER INFORMATION: n= any nucleotide  
 342 <220> FEATURE:  
 343 <221> NAME/KEY: misc\_feature  
 344 <222> LOCATION: (126)..(126)  
 345 <223> OTHER INFORMATION: n= any nucleotide  
 347 <220> FEATURE:  
 348 <221> NAME/KEY: misc\_feature  
 349 <222> LOCATION: (157)..(157)  
 350 <223> OTHER INFORMATION: n= any nucleotide  
 352 <400> SEQUENCE: 11  
 W--> 353 ttttacacac atccaacatg cccccc ttat ttaatc accanaagac gttaatntnt 60  
 355 nttaattcaac accccc tttt gctgcccngg tgnctnacac accactaaca cattccggtt 120  
 357 cataancatt catgctggc cgcgcgtgtgc ccgacanctt aaac 164  
 360 <210> SEQ ID NO: 12  
 361 <211> LENGTH: 8514  
 362 <212> TYPE: DNA  
 363 <213> ORGANISM: Artificial  
 365 <220> FEATURE:  
 366 <223> OTHER INFORMATION: plasmid pTWV011  
 369 <220> FEATURE:  
 370 <221> NAME/KEY: misc\_feature  
 371 <222> LOCATION: (52)..(1)  
 372 <223> OTHER INFORMATION: LB= left T-DNA border  
 374 <220> FEATURE:  
 375 <221> NAME/KEY: misc\_feature  
 376 <222> LOCATION: (318)..(58)  
 377 <223> OTHER INFORMATION: 3' nos  
 379 <220> FEATURE:  
 380 <221> NAME/KEY: misc\_feature  
 381 <222> LOCATION: (888)..(337)

**RAW SEQUENCE LISTING ERROR SUMMARY**      **DATE: 09/19/2006**  
**PATENT APPLICATION: US/10/623,500A**      **TIME: 13:28:55**

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**Please Note:**

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of/each sequence which presents at least one n or Xaa.

Seq#:3; N Pos. 540  
Seq#:5; N Pos. 82  
Seq#:11; N Pos. 45, 53, 57, 59, 61, 88, 93, 96, 126, 157  
Seq#:13; N Pos. 5630, 8436  
Seq#:26; N Pos. 1  
Seq#:27; N Pos. 1, 11  
Seq#:28; N Pos. 4, 9  
Seq#:29; N Pos. 5  
Seq#:30; N Pos. 1  
Seq#:31; N Pos. 2, 6

### Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete, per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#: 3, 5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31

## VERIFICATION SUMMARY

DATE: 09/19/2006

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Input Set : A:\10623500\_ST25\_txt.TXT

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L:144 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:480  
L:197 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:60  
L:353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0  
M:341 Repeated in SeqNo=11  
L:991 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:5580  
M:341 Repeated in SeqNo=13  
L:1294 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0  
L:1317 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0  
L:1350 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0  
L:1368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0  
L:1386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0  
L:1409 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31 after pos.:0